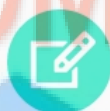
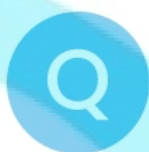


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QUIZZES

Practice Test-1(Electrochemistry)



7 Questions



7 min

Topics

Oxidative number or state, Balancing of redox equations by ion-electron method, Balancing redox equations by oxidation number change method

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 58



1/7



7 min



Hint

Q : The oxidation no. of hydrogen in NaH is



+1



-1



0



all of these

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 53



2/7



7 min



Hint

Q : The oxidation state of group 1A metals is ____ and that of group 2A is ____.

A

+1/-2

B

-1/-2

C

+1/+2

D

none of these

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 48



3/7



7 min



Hint

Q : The oxidation no. of Mn in MnO_4^{-2} is

A

+4

B

+5

C

+6

D

-6

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 43



4/7



7 min



Hint

Q : To balance oxygen in ion electron method in acidic solution, we add

A

ion

B

ion

C

H_2O

D

O_2

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 39



5/7



7 min



Hint

Q : How many electrons are required to balance the following half reaction



A

2e^{-1} on left side

B

2e^{-1} on right side

C

3e^{-1} on right side

D

3e^{-1} on left side

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 34



6/7



7 min



Hint

Q :

HBr is formed when bromine reacts with molecular hydrogen at high temperature.

$\text{H}_2 + \text{Br}_2 \rightarrow 2\text{HBr}$, the reaction is an example of

A

Disproportionation

B

Reduction

C

Oxidation

D

Redox

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 29



7/7



7 min



Hint

Q : Which is true about the reaction $\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$

A

Mg is reduced

B

Mg is oxidized

C

Cl_2 is oxidized

D

Cl_2 is reducing agent

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

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3

4

5

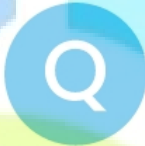
6

7



QUIZ RESULT

Practice Test-1(Electrochemistry)



7



7 min



01-May-2021



0 sec



0/7



0.0%

SAEED MDCAT

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT





Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



1/7

Q : The oxidation no. of hydrogen in NaH is



+1



-1



0



all of these

Explanation

Oxidation number of hydrogen in metal hydrides is "-1".



SAEEDMDCAT

1

2

3

4

5

6

7



Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



2/7

Q : The oxidation state of group 1A metals is ____ and that of group 2A is ____.

A

+1/-2

B

-1/-2

C

+1/+2

D

none of these

Explanation

SAEED MDCAT TEAM

Group number is O.N. of 1 and 2.



SAEEDMDCAT

1

2

3

4

5

6

7



WhatsApp

Practice Test-1(Electrochemistry)

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Correct



Unattempted



Incorrect



3/7

Q : The oxidation no. of Mn in MnO_4^{-2} is

+4



+5



+6



-6

Explanation

SAEED MDCAT TEAM

$$\text{Mn} + 4 \times 0 = -2$$

$$\text{Mn} + (-8) = -2$$

$$\text{Mn} = -2 + 8 = 6$$

1

2

3

4

5

6

7



Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



4/7

Q : To balance oxygen in ion electron method in acidic solution, we add

A

ion

B

ion

C

H_2O

D

O_2

Explanation

SAEED MDCAT TEAM

In ion method to balance 'O' atoms water molecules added.



SAEEDMDCAT

1

2

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4

5

6

7



Practice Test-1(Electrochemistry)



Correct



Unattempted

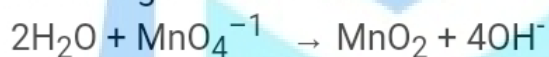


Incorrect



5/7

Q : How many electrons are required to balance the following half reaction



A

2e^{-1} on left side

B

2e^{-1} on right side

C

3e^{-1} on right side

D

3e^{-1} on left side

Explanation

SAEED MDCAT TEAM

Net charge on left side is -1 & on right side it has -4 charge, so to balance the charge 3 electrons are added to the left side.

1

2

3

4

5

6

7



Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



6/7

Q :

HBr is formed when bromine reacts with molecular hydrogen at high temperature.

$\text{H}_2 + \text{Br}_2 \rightarrow 2\text{HBr}$, the reaction is an example of

A

Disproportionation

B

Reduction

C

Oxidation

D

Redox

Explanation



SAEEDMDCAT

O.S of hydrogen change 0 to +1 and the O.S of bromine change 0 to -1. So, oxidation and reduction both takes place. It is the example of redox reaction

1

2

3

4

5

6

7



Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



7/7

Q : Which is true about the reaction $\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$

A

Mg is reduced

B

Mg is oxidized

C

Cl_2 is oxidized

D

Cl_2 is reducing agent

Explanation

SAEED MDCAT TEAM

Mg is oxidized from 0 to +2



SAEEDMDCAT

1

2

3

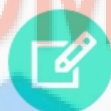
4

5

6

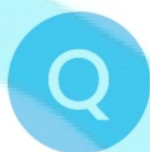
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QUIZZES

Practice test-2(Electrochemistry)



10 Questions



7 min

Topics

Explanation of electrolysis (Predict the Product), Standard electrode Potential, SHE and Cell Potential, Electrochemical Series and Applications

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 58



1/10



7 min



Hint

Q : The direction of flow of electrons through external circuit in electrolytic cell is from

A

Anode to cathode

B

Cathode to anode

C

Do not flow in external circuit

D

Vary from cell to cell

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 54



2/10



7 min



Hint

Q : The products of electrolysis of dilute aqueous sodium nitrate are

A

Na and O_2

B

H_2 and NO_2

C

H_2 and O_2

D

Na and NO_2

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 49



3/10



7 min



Hint

Q : The product of electrolysis will not be same in the case of

A

$\text{NaNO}_3(\text{aq})$

B

$\text{H}_2\text{SO}_4(\text{aq})$

C

$\text{NaOH}(\text{aq})$

D

$\text{CuSO}_4(\text{aq})$

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 45



4/10



7 min



Hint

Q : Temperature for the measurement of standard electrode potential is



298K



300K



30°C



310K

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 40



5/10



7 min



Hint

Q : The standard electrode potential is measured by

A

Electrometer

B

Voltmeter

C

Galvanometer

D

Polarimeter

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 36



6/10



7 min



Hint

Q : A standard hydrogen electrode has zero electrode potential because

A

Hydrogen is easier to oxidize

B

This electrode potential is assumed to be zero

C

Hydrogen atom has only one electron

D

Hydrogen is the lightest element

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 30



7/10



7 min



Hint

Q : Metal that deposits at cathode when aqueous solution of its salt is electrolysed

A

Na

B

Cu

C

Zn

D

Sn

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



QUIZ RESULT

Practice test-2(Electrochemistry)



10



7 min



01-May-2021



0 sec



0/10



0.0%

Result Detail

SAEED MDCAT TEAM



SAEEDMDCAT



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



1/10

Q : The direction of flow of electrons through external circuit in electrolytic cell is from



Anode to cathode



Cathode to anode



Do not flow in external circuit



Vary from cell to cell

Explanation

In electrolytic cell the direction of flow of electrons through external circuit is from anode to cathode



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



2/10

Q : The products of electrolysis of dilute aqueous sodium nitrate are

A

Na and O_2

B

H_2 and NO_2

C

H_2 and O_2

D

Na and NO_2

Explanation

In case of sodium nitrate, salt remains unchanged and water will be hydrolysed, due lower reduction potential of Na ion as compare to H ion, for anode, OH^- has higher oxidation potential as compare to nitrate ions.

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



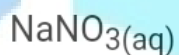
Incorrect



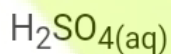
3/10

Q : The product of electrolysis will not be same in the case of

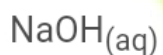
A



B



C



D



Explanation

In all other options salt remains unchanged, while in case of copper sulphate product will be different at cathode, that is Cu metal.

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



4/10

Q : Temperature for the measurement of standard electrode potential is



298K



300K



30°C



310K

Explanation

SAEED MDCAT TEAM

$25^{\circ}\text{C} = 298\text{K}$



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



5/10

Q : The standard electrode potential is measured by

A

Electrometer

B

Voltmeter

C

Galvanometer

D

Polarimeter

Explanation

The standard electrode potential is measured by Voltmeter



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



6/10

Q : A standard hydrogen electrode has zero electrode potential because

A

Hydrogen is easier to oxidize

B

This electrode potential is assumed to be zero

C

Hydrogen atom has only one electron

D

Hydrogen is the lightest element

Explanation

SAEED MDCAT TEAM

This electrode potential is assumed to be zero



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



7/10

Q : Metal that deposits at cathode when aqueous solution of its salt is electrolysed

A

Na

B

Cu

C

Zn

D

Sn

Explanation

Reduction potential of Cu is higher (+0.34) than other given options and deposit on cathode.



SAEEDMDCAT

1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



8/10

Q : Metals are strong ____agents and the non-metals are strong____ agents.

A

Oxidizing/reducing

B

Reducing/oxidizing

C

Oxidizing/oxidizing

D

Reducing/reducing

Explanation

Metals prefer to lose electron and non-metals prefer to gain electron.



SAEEDMDCAT

4

5

6

7

8

9

10



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



9/10

Q : Group 1 metals are ____ reactive than group 2 metals.



More



Less



Equal



No relation

Explanation

Group 1 metal have only one in valence shell and lose easily whereas 2nd group members have 2 valence and are less reactive than group 1 member



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



10/10

Q :

Which gas will be evolved at cathode during electrolysis of aq. CuCl_2 solution

A

H_2

B

Cl_2

C

Cu

D

None of these

Explanation

At cathode, Cu metal will be deposited so no gas evolves at cathode

4

5

6

7

8

9

10